

## **REMARKS**

As noted in the claim objections, claim 88 is missing. Applicant is presently canceling claim 88 for clarification purposes although there was merely an omission in the claim numbers. No new claims have been added.

On page 2, paragraph 3 of the Office Action, claim 24 was rejected under 35 U.S.C. 112, second paragraph, on the grounds that the term “said document” lacked antecedent basis. Applicant has amended claim 24 to correct the antecedent basis by using the term “electronic ticket” from independent claim 13 from which claim 24 depends. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection.

On page 3, paragraph 5 of the Office Action, claims 1, 3-9, 12-19, 22-23, 25-26, 28-33, 36-42, 44-50, 53-54, 56-59, 61-65, 68-69, 71-75, 78-79, 81-86 and 90 were rejected under 35 U.S.C. 103(a) as being unpatentable over Powar, U.S. Patent No. 6,285,991 (“Powar”) in view of Buros et al., U.S. Patent No. 6,775,782 (“Buros”). Applicant submits that the above combination of references does not render the present invention obvious as there are significant non-obvious differences between the combination of cited references and the present invention. In Powar, the relationships and the proofs are only between two parties despite the fact that a chain of authorities is established by following each pair’s authenticity. A certification hierarchy is established in which a higher authority certifies the authenticity of the subordinate parties (col. 6, lines 49-53). For example, according to Powar, a certification authority grants a digital certificate to a certificated bank, which in turn is authorized to grant a digital certificate to a biller and a customer, respectively (col. 4, lines 54-64). A digital certificate consists of digital data of a particular form and content, as established by a certification authority (col. 7, lines 6-8). The biller authenticates the customer’s request by first authenticating the customer’s certificate

to verify that the customer has been validly certified by a validly certified certificated bank and to obtain the customer's public key. The biller then uses the customer's public key to decrypt the customer's digital signature, obtaining a message digest of the request itself, and compares the message digest from the customer's decrypted digital signature to a message digest of the request as received by the biller (col. 10, lines 29-41). The digital signature allows the recipient to verify the originator of the message and that the message has not been changed en route to the recipient (col. 12, lines 65-67). Thus, in Powar, the parties in the identity chain are not involved in creation and validation of the document or message itself and do not even know about its existence. Thus, in Powar, the relationship is between two parties – the single party who creates or authors the document and the party who receives the document. The other parties in the certificate identity chain do not know about the existence of the document. In other words, in Powar, documents are issued by one party and consumed by another party. In contrast, the present invention allows at least three consenting parties to issue and consume the same document. The present invention uses multiple signatories to prove co-authorship as verifying information is added to the document about each of the parties to the document in order to validate the document. At least one of the parties presents the document to at least one other of the parties prior to communication of the confidential information there between. In the present invention, the document is trusted because the at least three parties have consented to it. Applicant submits that there is neither any teaching or suggestion in the combination of cited references to arrive at such a method nor is there any teaching or suggestion as to how to do so.

Furthermore, Buros' validity period is based upon a single expiration date associated with a single certificate (col. 16, lines 60-65). In contrast, the present invention allows three or more parties to supply expiration dates, and the expiration date is reconciled to the earliest acceptable

date. In essence, the present invention allows the at least three consenting parties to mutually agree upon an expiration date. Buross relates to the validity of the identity (i.e. the chain) as opposed to the document itself. In Buross, it is the identity that has the expiration date as opposed to the document itself having the expiration date. In the present invention, not only does the document itself have an expiration date, but the expiration date is set by the agreement of all of the consenting parties. Each author can set an earlier expiration date although none can extend it.

Furthermore, there are other non-obvious differences between the combination of cited references and the present invention. Powar refers to encryption of entire documents. However, the present invention encrypts portions of documents where each party is capable of decrypting portions of documents. Powar teaches using a digital signature to prove a document's authorship. In contrast, the present invention uses multiple signatures to prove co-authorship.

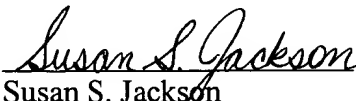
Powar discusses the creation of a single document created by one party, and having one digital signature to prove document authorship. A chain of digital signatures also attests to the author's identity; however, this does not render the present invention obvious since the present invention attests to a document's multiple authorship. In other words, even though multiple signatures exist in Powar's documents, only one signature is used to prove authorship. The other signatories know nothing about the production of Powar's documents. The present invention requires every party involved to attest to the document's authorship. Powar discusses that all parties can validate all digital certificates. However, in contrast, in the present invention all parties can validate the document's authorship. Validating multiple identities is not the same as validating multiple authorship by using identities. Powar is directed to a single party assembling security information from multiple parties. In contrast, the present invention, relates to multiple

parties assembling a single security document such as an electronic ticket. Accordingly, in view of the above, Applicant respectfully requests reconsideration and withdrawal of the rejection.

On page 7, paragraph 6 of the Office Action, claims 10-11, 20-21, 51-52, 66-67, 76-77, 87 and 89 were rejected under 35 U.S.C. 103(a) as being unpatentable over Powar in view of Buros and further in view of Schneier. For the same reasons as discussed above, Applicant submits that the present invention is non-obvious in view of the above combination of references. Schneier does not provide any of the teachings or suggestions or motivation that are lacking in Powar and Buros. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection.

In view of the foregoing, it is respectfully urged that the present claims are in condition for allowance and reconsideration is requested. An early notice to this effect is earnestly solicited. Should there be any questions regarding this application, the Examiner is invited to contact the undersigned at the number shown below.

Respectfully submitted,

  
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